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A National Framework

ecosystem management



Forestry Program

United States Department of Agriculture

Forest Service



A National Framework

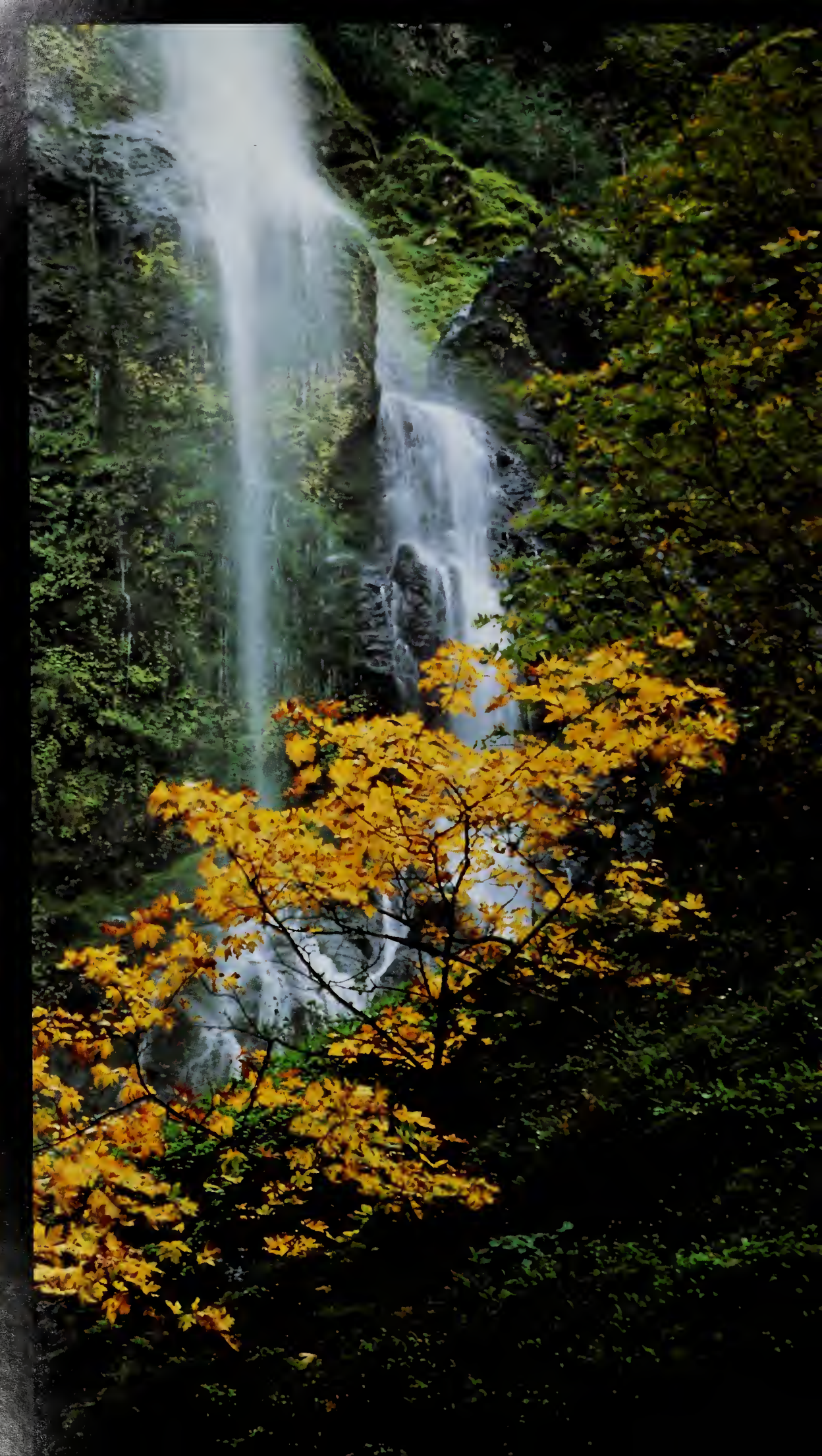
ecosystem management



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Fundamental Principles Guide the Implementation of Ecosystem Management.



To the Men and Women of the

forest service:

We live and work in extraordinary times— times that call upon us to respond with extraordinary leadership. We are being called upon more than ever to sustain national forests and grasslands for multiple values and uses. We are being called upon to close the gap between government and citizens, between people and land. We must reaffirm our love for the land and build new **Partnerships** with the people.

We must learn to work together more closely and in ways that take advantage of our different strengths and backgrounds. By doing this we can better understand and care for whole ecosystems, not just their many parts. We have listened to our customers, our friends, our partners, and our critics. The American people want us to embrace a new conservation ethic—an ethic based on shared responsibility for achieving harmony between land and people.

Ecosystem management is our response to this call for a new framework for management of the national forests and grasslands. We have modified our mission and vision statements, released several discussion papers, held workshops, and moved ahead on many fronts to implement **Ecosystem Management** across the country. This ecosystem management strategy provides a simple, condensed statement of where we're headed.

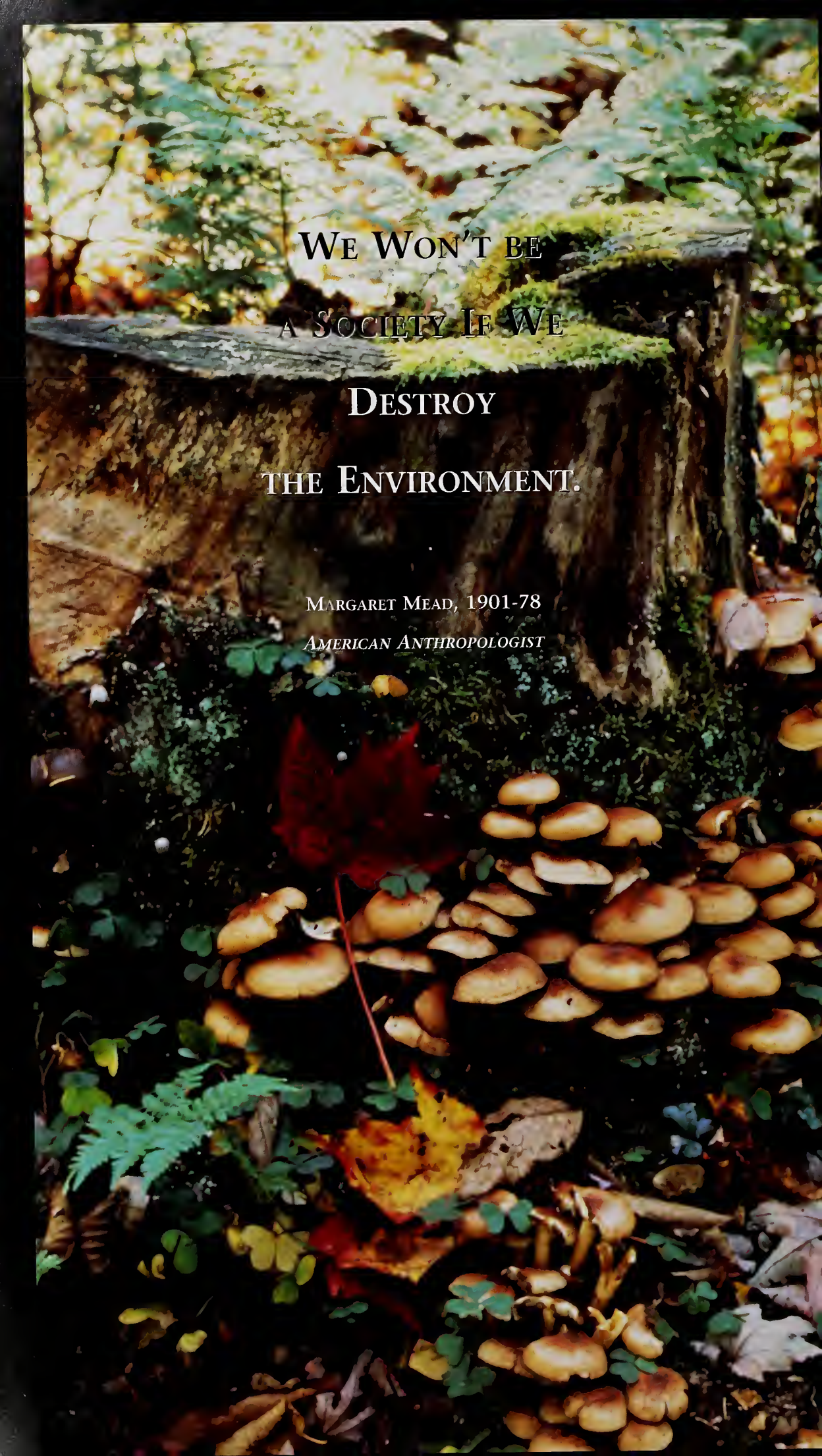
We want the Forest Service to be regarded as an organization that energetically protects and wisely manages national forests and grasslands for the American people. We want out children's children to be able to look back on what we have done and be thankful for the good choices we made. The ecosystem management approach will help us make these the best choices we can. Make it your approach to every resource management decision!





The Frog Does
Not Drink Up
the Pond in Which
He Lives.

American Indian Proverb


We Won't be
a Society if We
Destroy
the Environment.
Margaret Mead, 1901-78
American Anthropologist

Why Ecosystem Management *now?*

Ecosystem management points us toward a new vision for the national forests and grasslands. That embraces the idea that, working with our partners and concerned citizens, we can sustain systems that are not only healthy, diverse, and beautiful but economically productive and useful as well. Fulfilling this vision is a major challenge, but one that we in the Forest Service welcome.

Management of the national forests and grasslands must be founded on good **Scientific Information**. Science shows that ecosystems are laced together with many internal threads—species, processes, cycles, and components that are interrelated. Yet science doesn't provide us with all the answers we need. Increasingly we see that there are major gaps in our understanding of ecological processes and the human dimensions of landscapes and land management. Citizens and partners insist that we pay more attention to beauty and spiritual values and that we create more meaningful opportunities for public **Participation** in decisionmaking. A dramatic change in our approach to management is needed.

On June 4, 1992, ecosystem management became the new framework for use and care of the national forests and grasslands. This announcement followed a 2-year experiment in ecological approaches to management that we called New Perspectives. But the roots of ecosystem management go much deeper, drawing from the Organic Act, Multiple Use-Sustained Yield Act, National Environmental Policy Act, and National Forest Management Act and other laws; advances in science; and from the changing values and needs of the American people. With deep commitment to Caring for the Land and Serving People, the Forest Service will work to make this new vision a reality.

LET US NOT
GO OVER
THE OLD GROUND,
LET US RATHER
PREPARE
FOR WHAT IS
TO COME.

MARCUS TULLIUS CICERO, 106-43 B.C.
ROMAN STATESMAN

Ecosystem management is not an end in itself, but a means to achieve sustainable conditions and provide wildlife and fish habitat, outdoor recreation, wilderness, water, wood, mineral resources, and forage for society while retaining the esthetic, historic, and spiritual qualities of the land.

Let Us Not
Go Over
the Old Ground,
Let Us Rather
Prepare
for What is
to Come.

Marcus Tullius Cicero, 106-43 B.C.
Roman Statesman

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Using an

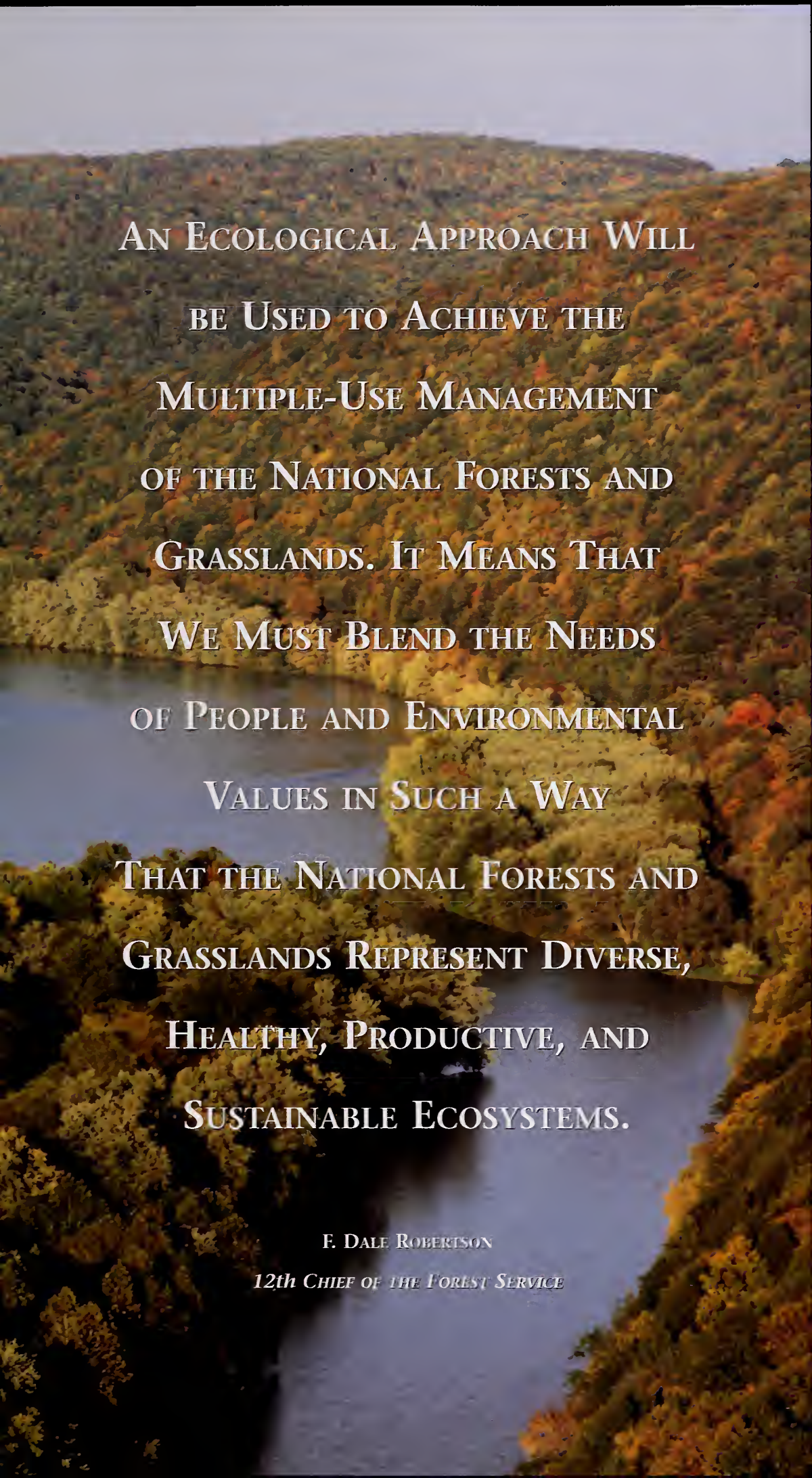
ecological approach

We Will Use Ecosystem Planning and Management Concepts in Assisting State and Private Landowners to Meet Their Objectives.

why?

Because We Need to Focus First on the Processes that Keep Those Public Lands Healthy, Beautiful, Diverse, and Productive!





An Ecological Approach Will be Used to Achieve the Multiple-Use Management of the National Forests and Grasslands. It Means That We Must Blend the Needs of People and Environmental Values in Such a Way That the National Forests and Grasslands Represent Diverse, Healthy, Productive, and Sustainable Ecosystems.

F. Dale Robertson

12th Chief of the Forest Service



people are part of ecosystems

Ecosystem management requires blending social, economic, and ecological factors. The cultural identities, family heritage, lifestyles, and livelihoods of people are linked with the ecosystems that support them.











THE FOREST SERVICE

will:

▲

IMPROVE UNDERSTANDING

OF THE WAYS PEOPLE ARE SHAPED BY AND IN TURN SHAPE ECOSYSTEMS.

▲

FOCUS SPECIAL ATTENTION

ON THE WAYS HUMAN USES AND VALUES AFFECT ECOSYSTEM CONDITIONS, BOTH NEAR AND LONG TERM, AND ADJUST AS NEEDED TO IMPROVE LONG-TERM SUSTAINABILITY.

▲

MEET THE NEEDS

OF PEOPLE FOR WILDLIFE AND FISH, OUTDOOR RECREATION, WILDERNESS, WATER, WOOD, FORAGE FOR DOMESTIC ANIMALS, AND OTHER BENEFITS WITHIN THE LAND'S CAPABILITIES.

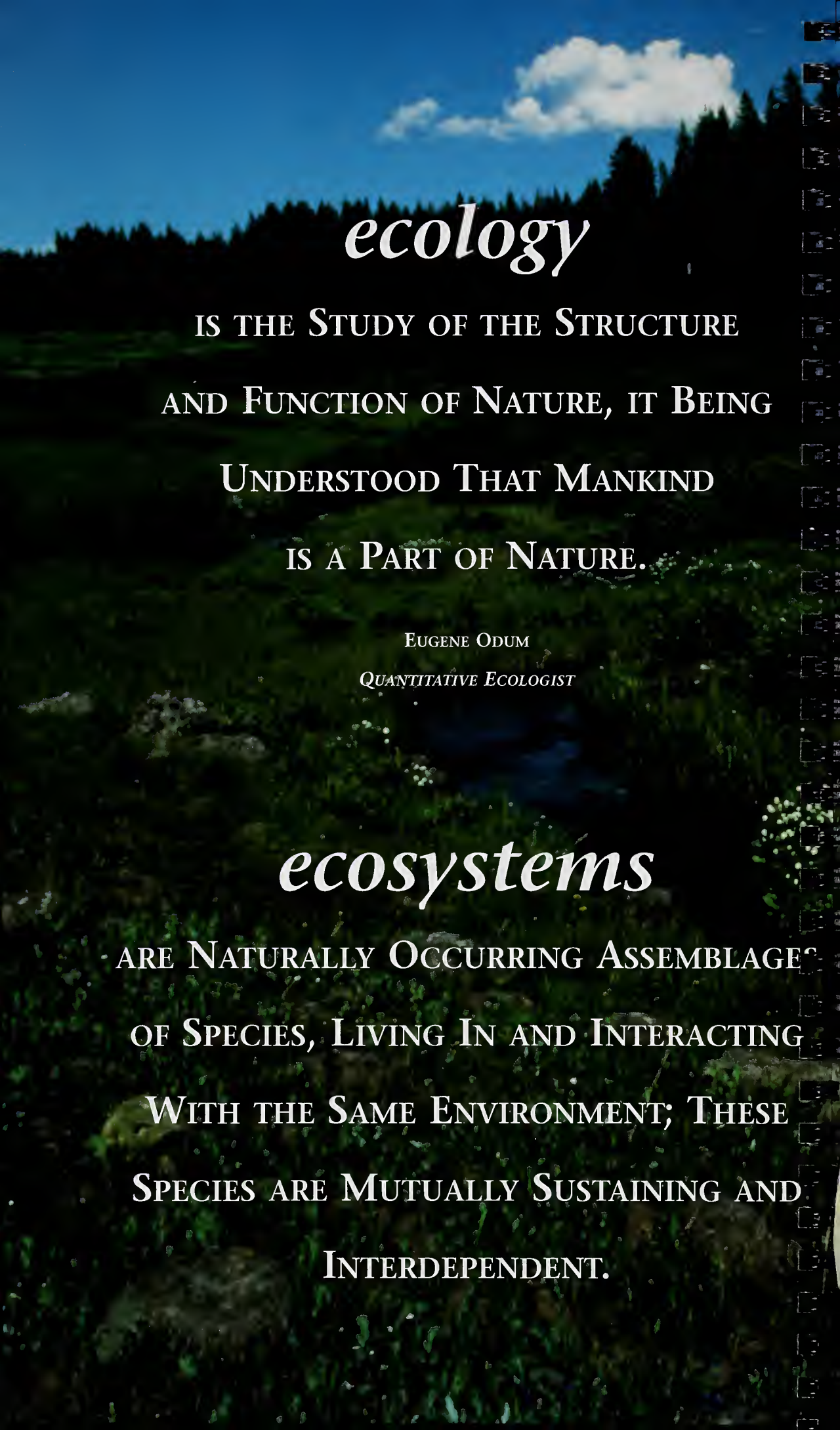




Ecosystems Are

constantly changing

Future conditions are not perfectly predictable, and any ecosystem offers many options for uses, values, products, and services.



ecology

IS THE STUDY OF THE STRUCTURE AND FUNCTION OF NATURE, IT BEING UNDERSTOOD THAT MANKIND IS A PART OF NATURE.

EUGENE ODUM

QUANTITATIVE ECOLOGIST

ecosystems

ARE NATURALLY OCCURRING ASSEMBLAGES OF SPECIES, LIVING IN AND INTERACTING WITH THE SAME ENVIRONMENT; THESE SPECIES ARE MUTUALLY SUSTAINING AND INTERDEPENDENT.

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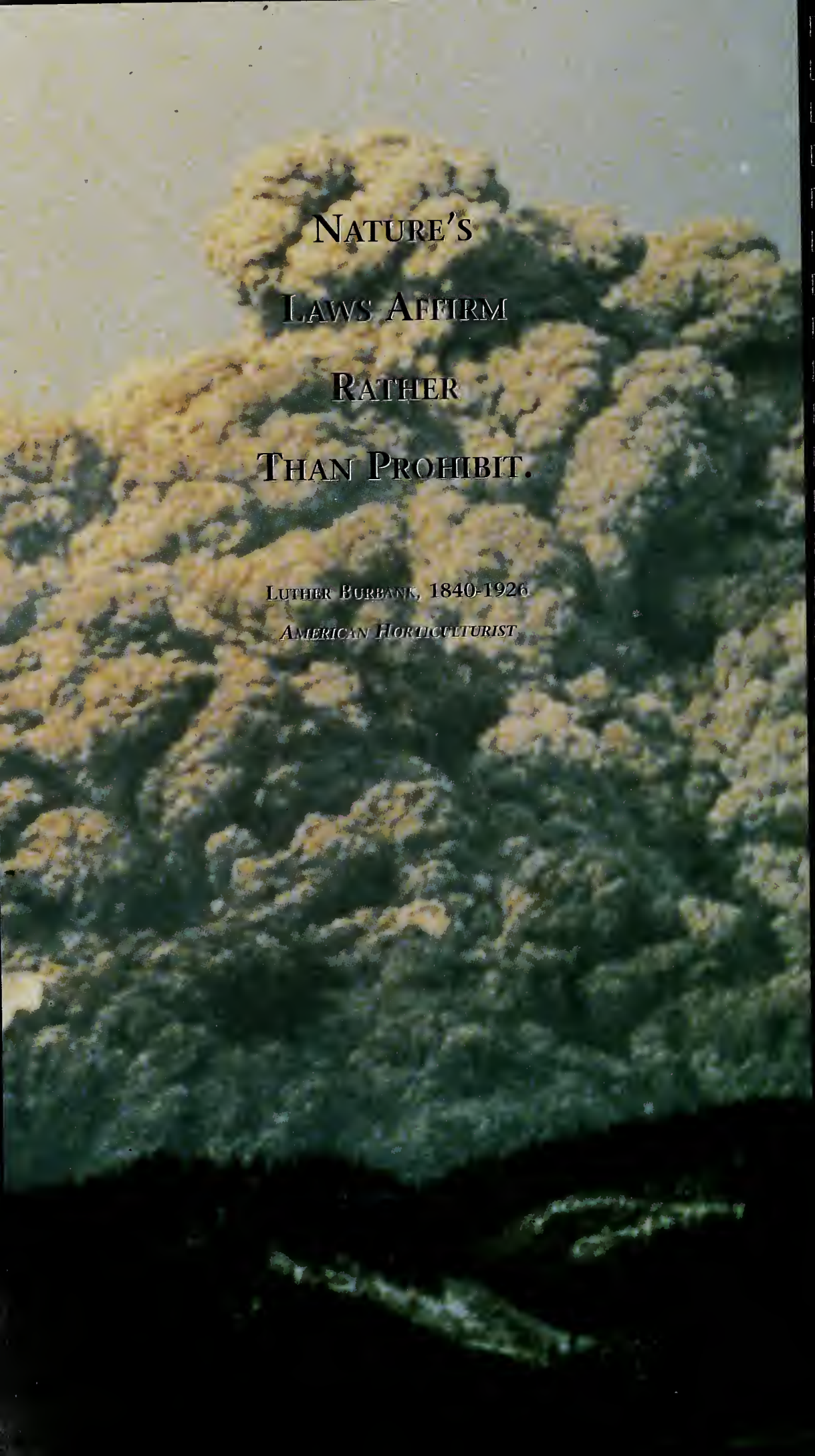
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Nature's
Laws Affirm
Rather
Than Prohibit.
Luther Burbank, 1840-1926
American Horticulturist

THE FOREST SERVICE

will:

▲

FULLY CONSIDER

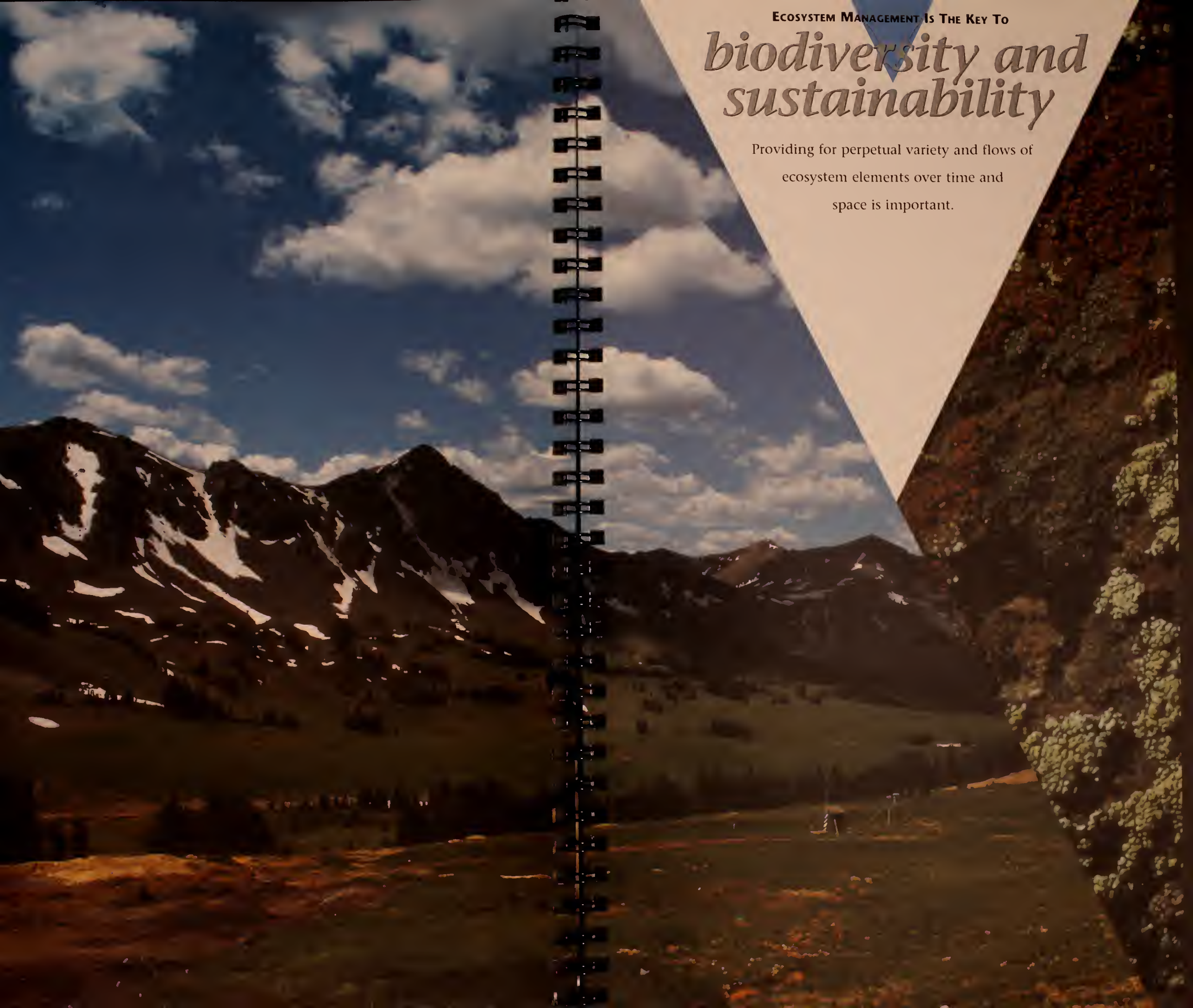
THE EFFECTS OF PROPOSED ACTIONS AT SEVERAL GEOGRAPHIC SCALES AND OVER TIME.

▲

DEVELOP AND USE

BROADLY ACCEPTED VITAL SIGNS FOR ECOSYSTEM HEALTH—THE TRENDS WE NEED TO FOLLOW MOST CLOSELY. MONITOR THESE VITAL SIGNS OVER TIME AND USE THE RESULTS TO MAKE NEEDED CHANGES IN MANAGEMENT DIRECTION.

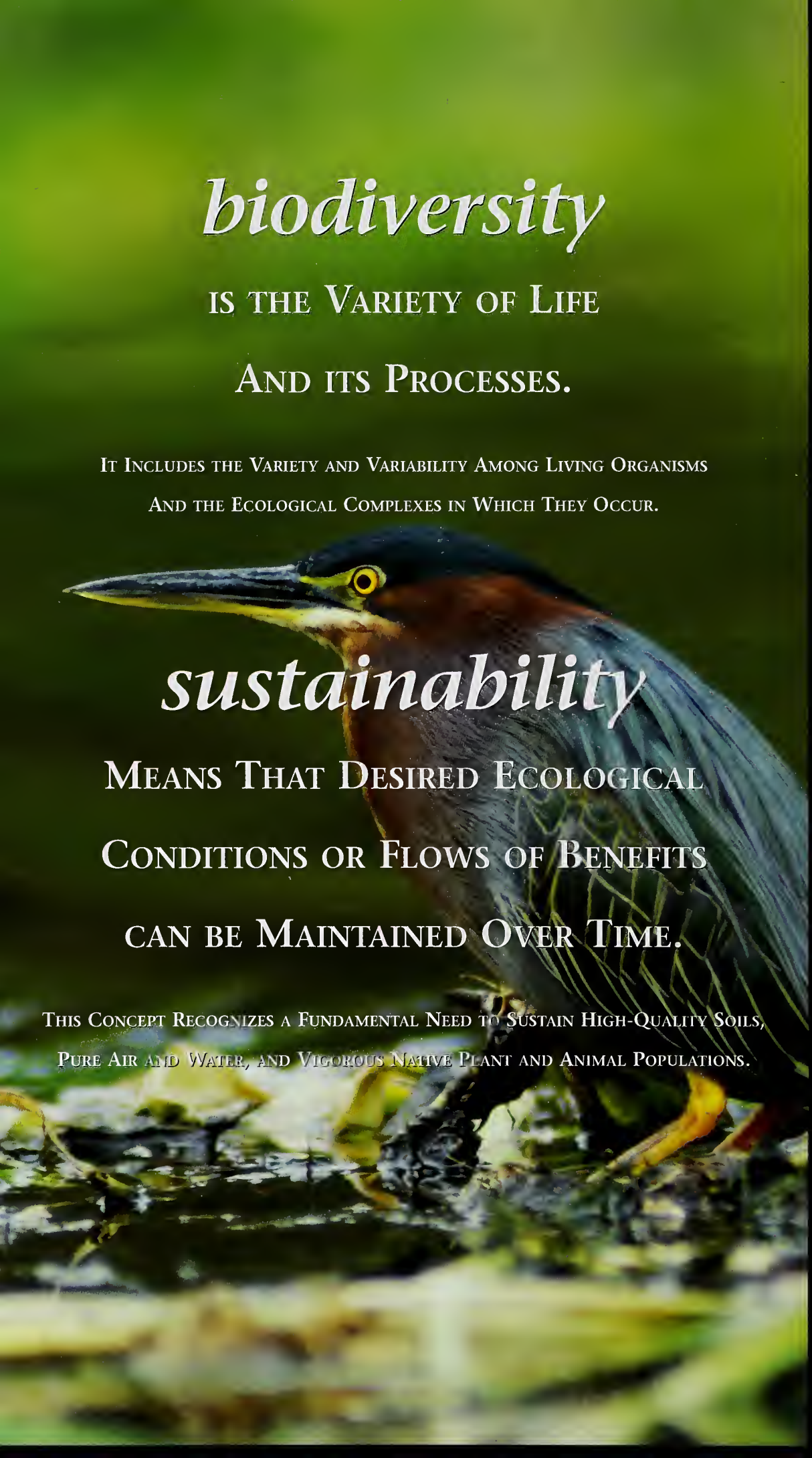




ECOSYSTEM MANAGEMENT IS THE KEY TO

biodiversity and sustainability

Providing for perpetual variety and flows of ecosystem elements over time and space is important.



biodiversity

is the Variety of Life

And its Processes.

It Includes the Variety and Variability Among Living Organisms

And the Ecological Complexes in Which They Occur.

sustainability

Means That Desired Ecological

Conditions or Flows of Benefits

can be Maintained Over Time.

This Concept Recognizes a Fundamental Need to Sustain High-Quality Soils,

Pure Air and Water, and Vigorous Native Plant and Animal Populations.

THE FOREST SERVICE

will:

MAINTAIN

THE PRODUCTIVITY OF OUR SOILS AND THE PURITY OF OUR WATER AND AIR.

CARE FOR

THE NATIONAL FORESTS & GRASSLANDS IN WAYS THAT SUSTAIN POPULATIONS OF ALL NATIVE PLANTS AND ANIMALS; PROVIDE HABITAT FOR HEALTHY POPULATIONS OF GAME ANIMALS AND FISH FOR RECREATION, SUBSISTENCE, AND COMMERCIAL USE; AND PROTECT THREATENED, ENDANGERED, AND SENSITIVE SPECIES.

MAINTAIN HIGH LEVELS

OF NATURAL BEAUTY IN THE LANDSCAPES OF THE NATIONAL FOREST SYSTEM.

ON THE NATIONAL FORESTS

USE TIMBER HARVESTS TO PROVIDE WOOD PRODUCTS AND ACHIEVE ECOLOGICAL OBJECTIVES, ELIMINATING CLEARCUTTING AS A STANDARD HARVEST PRACTICE. WHERE CLEARCUTTING IS NECESSARY TO MEET CRITICAL WILDLIFE HABITAT NEEDS—SUCH AS FOR THE FLORIDA SCRUB JAY—OR TO MEET OTHER CRITICAL ECOLOGICAL NEEDS—SUCH AS RESTORATION OF NATIVE FORESTS—IT WILL BE USED WITH CARE AND SENSITIVITY.



Monitor and Provide

careful management for portions of the national forests and grasslands where commercial timber harvests are not appropriate—natural areas, wilderness areas, sensitive habitats, streamside protection zones, and special interest areas.



Restore

the health and vitality of degraded ecosystems.



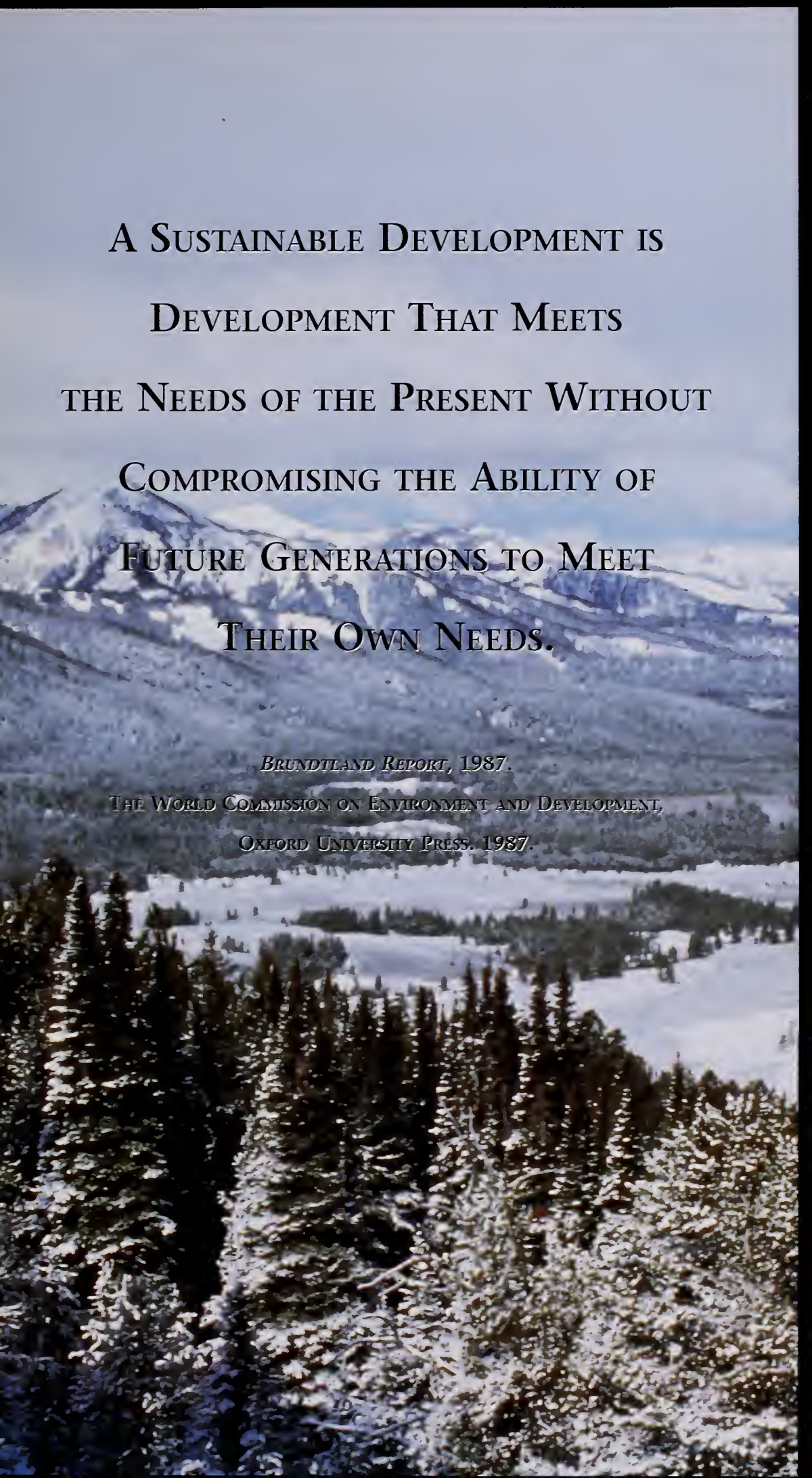
Embrace opportunities

to meet human needs for nonrenewable resources in a responsible, environmentally sensitive manner.



Manage Vegetation

with grazing animals to meet ecological objectives.



A Sustainable Development is Development That Meets the Needs of the Present Without Compromising the Ability of Future Generations to Meet Their Own Needs.

Brundtland Report, 1987.
The World Commission on Environment and Development,
Oxford University Press. 1987.

ECOSYSTEM MANAGEMENT DECISIONS REQUIRE STRONGER LINKS BETWEEN

human uses & desired ecological conditions

Descriptions of desired conditions for ecosystems at various geographic scales should guide management activities now and in the future.



THE FOREST SERVICE

will:



STRIVE FOR GREATER HARMONY

BETWEEN HUMAN USES AND DESIRED ECOLOGICAL CONDITIONS FOR THE LAND.



TREAT ENVIRONMENTALLY SENSITIVE

PRODUCTION OF GOODS AND SERVICES AS ONE OF MANY DESIRED OUTCOMES OF ECOSYSTEM MANAGEMENT.


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2000

forging partnerships

We Will Actively Form and Encourage Partnerships to Achieve Shared Goals.

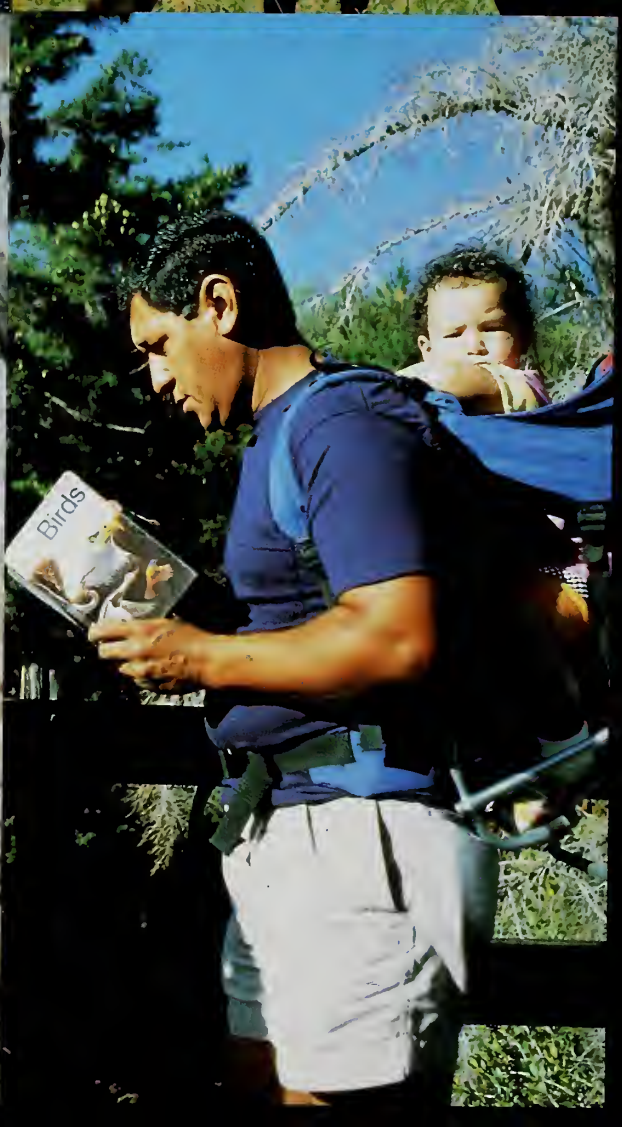
why?

Ecosystem Management Requires Continuing Cooperation Among Varied Public Interests, Land Managers, Land Users, Biologists, Foresters, Hydrologists, Economists, Engineers, Sociologists, Botanists, Geologists, Scientists, Technicians, and Other Professionals. Ecosystems Cross Jurisdictional Lines, Making the Need for Cooperation, Coordination, and Partnerships Great.








Birds

THE FOREST SERVICE

will:

RECOGNIZE

THAT ECOSYSTEM MANAGEMENT IS A SHARED RESPONSIBILITY . . .

BECAUSE WE ARE ALL A PART OF ECOSYSTEMS!

COOPERATE WITH

THOSE WHO HAVE AN INTEREST IN THE MANY NATURAL RESOURCE CONCERNS THAT CROSS JURISDICTIONAL LINES—FOR EXAMPLE, FISH AND WILDLIFE HABITAT, CUMULATIVE EFFECTS ON WATERSHEDS, AND RURAL COMMUNITY ASSISTANCE.

STRIVE

TO BE GOOD NEIGHBORS WHO RESPECT PRIVATE PROPERTY RIGHTS.

TEST INNOVATIVE IDEAS

THROUGH PARTNERSHIP DEMONSTRATION PROJECTS.

INCREASE INTERDISCIPLINARY COOPERATION

AND COORDINATION AMONG SOCIAL, PHYSICAL, AND BIOLOGICAL SCIENCES.



PROMOTING

grass–roots participation

WE PROMOTE GRASS-ROOTS PARTICIPATION IN FOREST SERVICE DECISIONS AND ACTIVITIES.

why?

BECAUSE WE WANT TO CLOSE THE GAP BETWEEN PEOPLE AND GOVERNMENT, REDUCE CONFLICT, AND DEVELOP SHARED EXPECTATIONS FOR THE LANDS OF THE NATIONAL FOREST SYSTEM.








ANIMALS,
HE TREES?
THE BIRDS!
NO
KNOW

THE FOREST SERVICE

will:

▲

PLACE STRONG EMPHASIS

ON EFFECTIVE PUBLIC INVOLVEMENT . . . TO INCORPORATE PUBLIC NEEDS AND DESIRES INTO MANAGEMENT DECISIONS.

▲

IMPROVE

OUR INTERNAL AND EXTERNAL COMMUNICATION.

▲

EMBRACE

PUBLIC PARTICIPATION AS BOTH DESIRABLE AND ESSENTIAL FOR ESTABLISHING LONG-TERM COMMITMENTS TO LAND STEWARDSHIP.



using best science

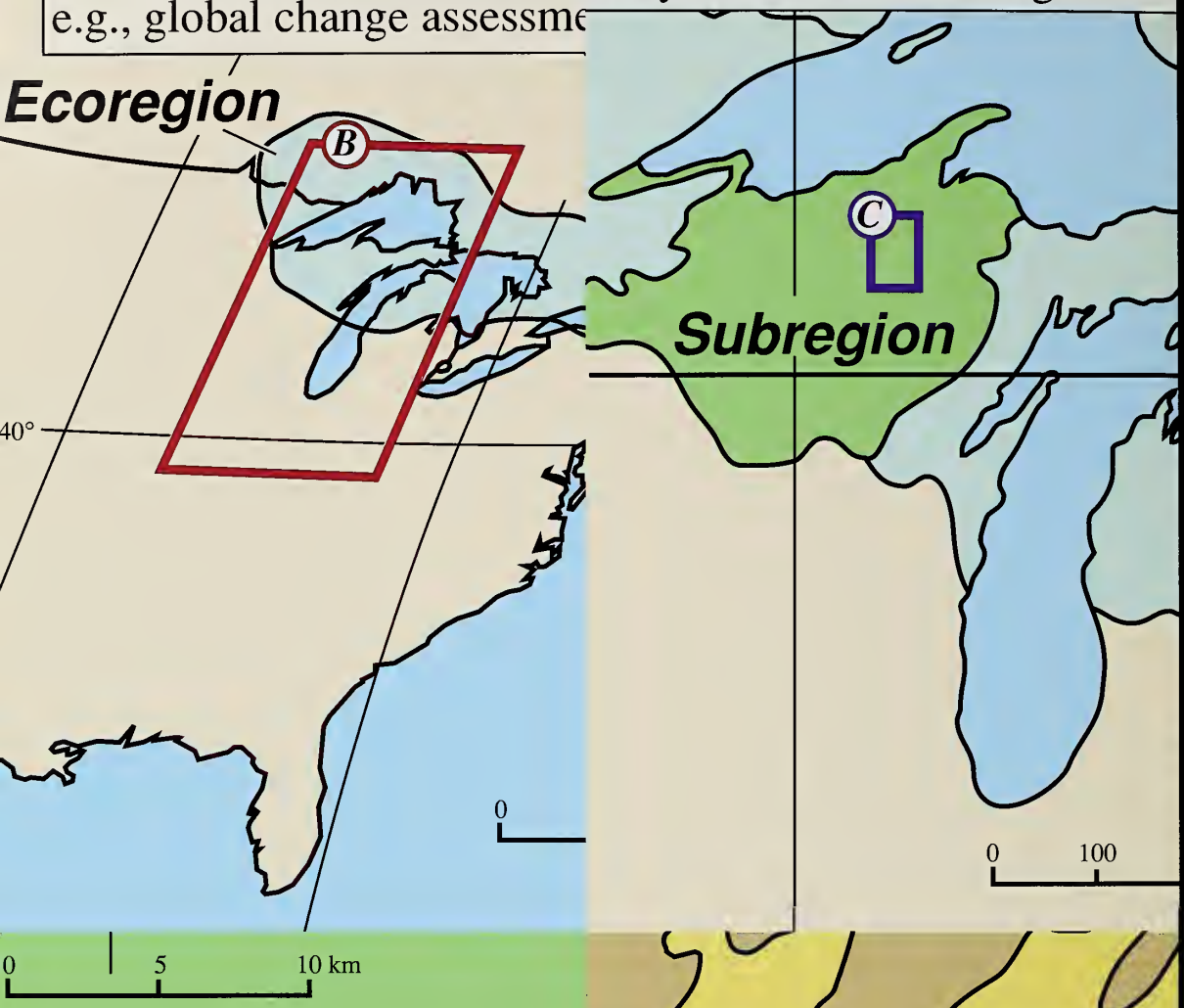
We Strive to Use the Best Applicable Science Available for Decisionmaking and the Most Appropriate Technologies for Land Management. Ecosystem Management Calls for Integrated Resource Information.

why?

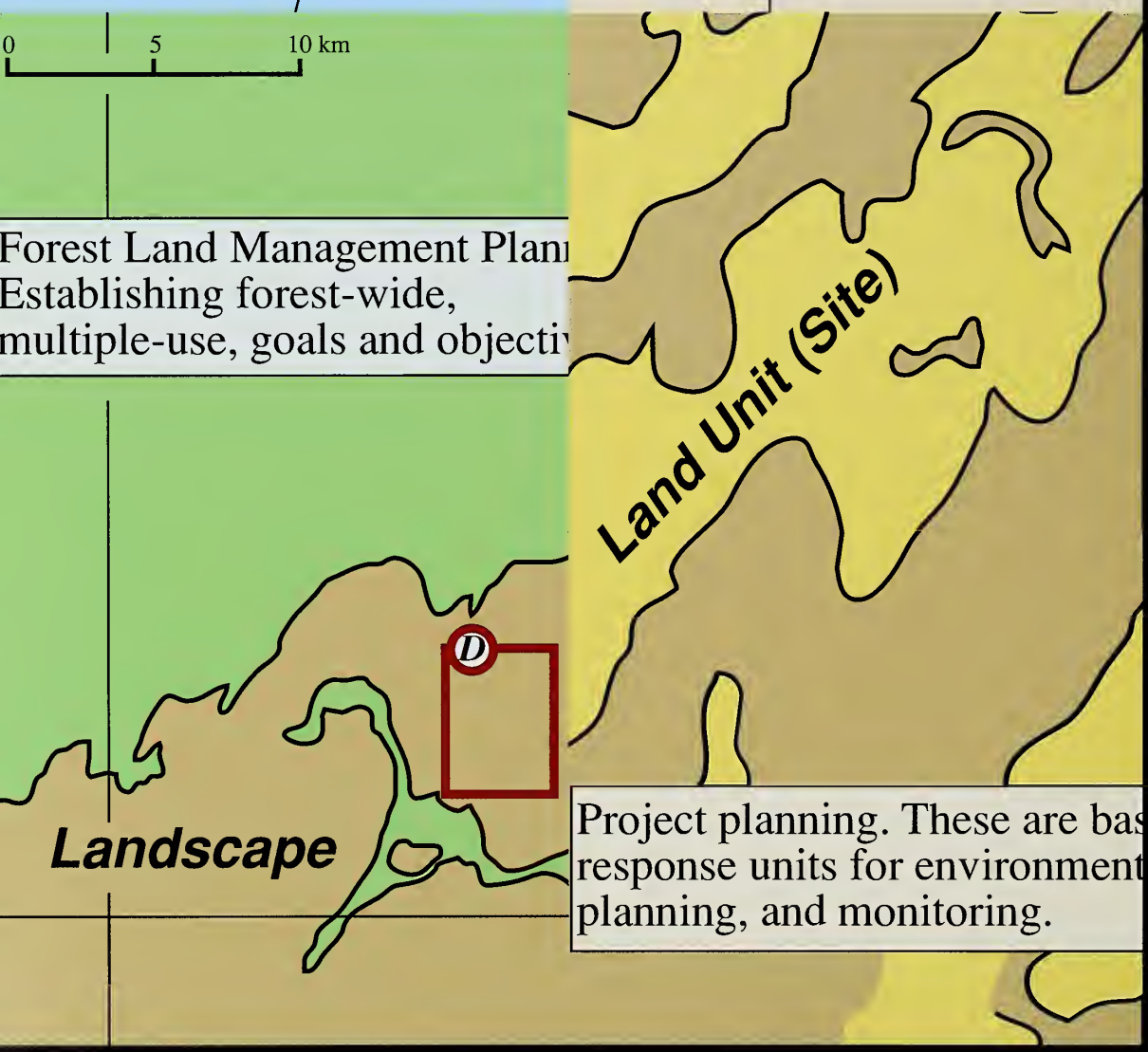
Scientific Information Helps Us Better Understand the Range of Choices for Action and the Consequences of Following One Path Versus Another.

National analysis and assess
Used for broad area process
e.g., global change assessme

and state planning. Used for pro
analysis and data sharing.



Forest Land Management Plan
Establishing forest-wide,
multiple-use, goals and objecti



Project planning. These are bas
response units for environment
planning, and monitoring.

THE FOREST SERVICE

will:

EMPHASIZE RESEARCH

THAT ADDRESSES CRITICAL ISSUES. FOR EXAMPLE, WE NEED TO KNOW MORE ABOUT HOW ECOSYSTEMS FUNCTION AT LARGE SCALES—WATERSHEDS AND LANDSCAPES.

SUMMARIZE KNOWLEDGE

ABOUT ECOSYSTEMS AND MAKE THE INFORMATION AVAILABLE TO PEOPLE WHO NEED IT! WE WILL PROVIDE INFORMATION ABOUT THE MANAGEABLE PARTS OF ECOSYSTEMS (SPECIES, SPECIES GROUPS, HUMAN BEHAVIOR) TO RESOURCE MANAGERS.

DETERMINE DESIRED CONDITIONS

FOR THE NATIONAL FORESTS AND GRASSLANDS; MANAGE TO ACHIEVE THESE CONDITIONS; AND THEN ADAPT MANAGEMENT BY MONITORING ITS RESULTS, EVALUATING THESE RESULTS, AND CHANGING MANAGEMENT AS NEEDED.

PROMOTE RESEARCH

PARTNERSHIPS THAT INCLUDE A BROAD RANGE OF NATURAL AND SOCIAL SCIENCES.



Promote More Studies

of the Social and Cultural Dimensions of Ecosystem Management, Including Studies of the Changing Perceptions, Needs, and Values of People in Relation to National Forests and Grasslands.



Collect and Manage

Information in Ways that Enable Us to Describe and Treat Ecosystems More as Wholes Than as Sets of Unrelated Parts.



Fully Utilize

State-of-the-Art Data Gathering and Analysis Systems Such as Remote Sensing and Geographic Information Systems (GIS), Especially at Landscape Scales.



Achieve

Greater Compatibility and Consistency With Other Land Management Agencies and Organizations.



Ecosystem management requires more integrated resource inventories, monitoring, and analysis, as well as ecological classifications that encompass the full range of geographic scales.

Ecosystem management decisions should be based on the best applicable science available, recognizing that the information base can always be improved. Research scientists, land managers, and others are seeking to make the ecosystem knowledge base better.



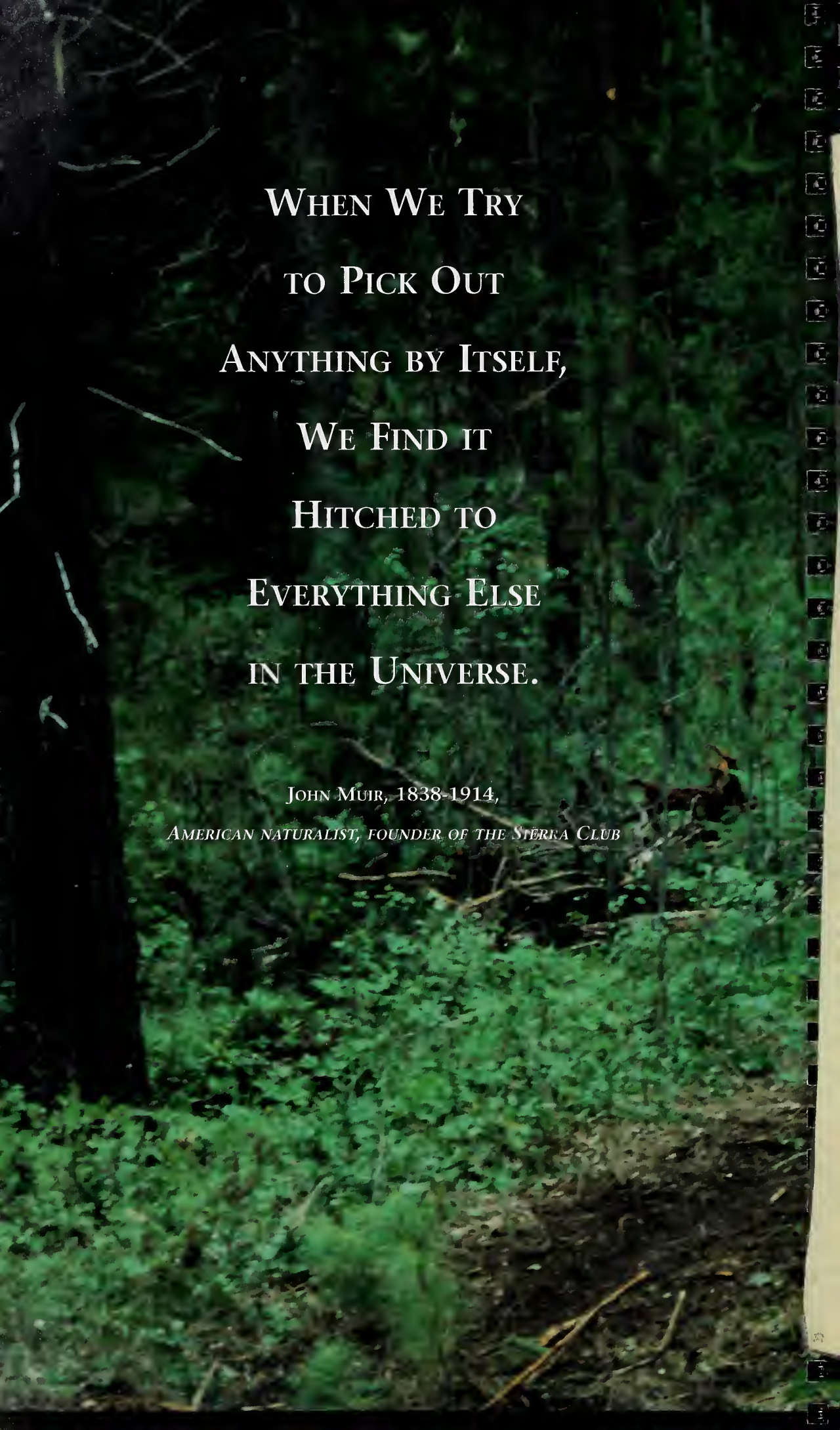
The Challenge *ahead!*

Ecosystem Management is One of the Greatest Challenges the Forest Service has Ever Accepted. Our National Strategy Makes it Clear That We Must Move Ahead Now to Transform the Principles of Ecosystem Management Into Action.

This Strategy Does Not Point Us Toward "One Answer," But Rather to Thousands of Answers That We Will Develop With Local People and Partners.

To Make Ecosystem Management a Success, We Must Strengthen our Dialogue and Coordination With our Neighbors, Other Agencies, State Governments, Indian Tribes, Citizen Groups, and Conservation Organizations.

By Working Together, We can Ensure That our National Forests and Grasslands are Outstanding Examples of Diverse, Healthy, Productive, and Sustainable Ecosystems.


When We Try
to Pick Out
Anything by Itself,
We Find it
Hitched to
Everything Else
in the Universe.
John Muir, 1838-1914,
American naturalist, founder of the Sierra Club

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To the Men and Women of the

forest service:

And So

We must implement ecosystem management under existing Forest Plans —now— and then incorporate it into future plans! We will participate in ecoregional assessments to synthesize available ecosystem knowledge and identify key information gaps. Our leaders will support these efforts in working with USDA, Congress, other agencies, interest groups, and our national partners. An ecological approach to managing the many uses and values of our national forests and grasslands places the Forest Service in a leadership role in the protection of our natural resources. The application of our best scientific knowledge, with the support of our partners and involving the public at the grass-roots level, will help us succeed in that role. We are moving into the future.

The Time to Make A Difference is Now.

RARY

Jack Ward Thomas

Chief, Forest Service



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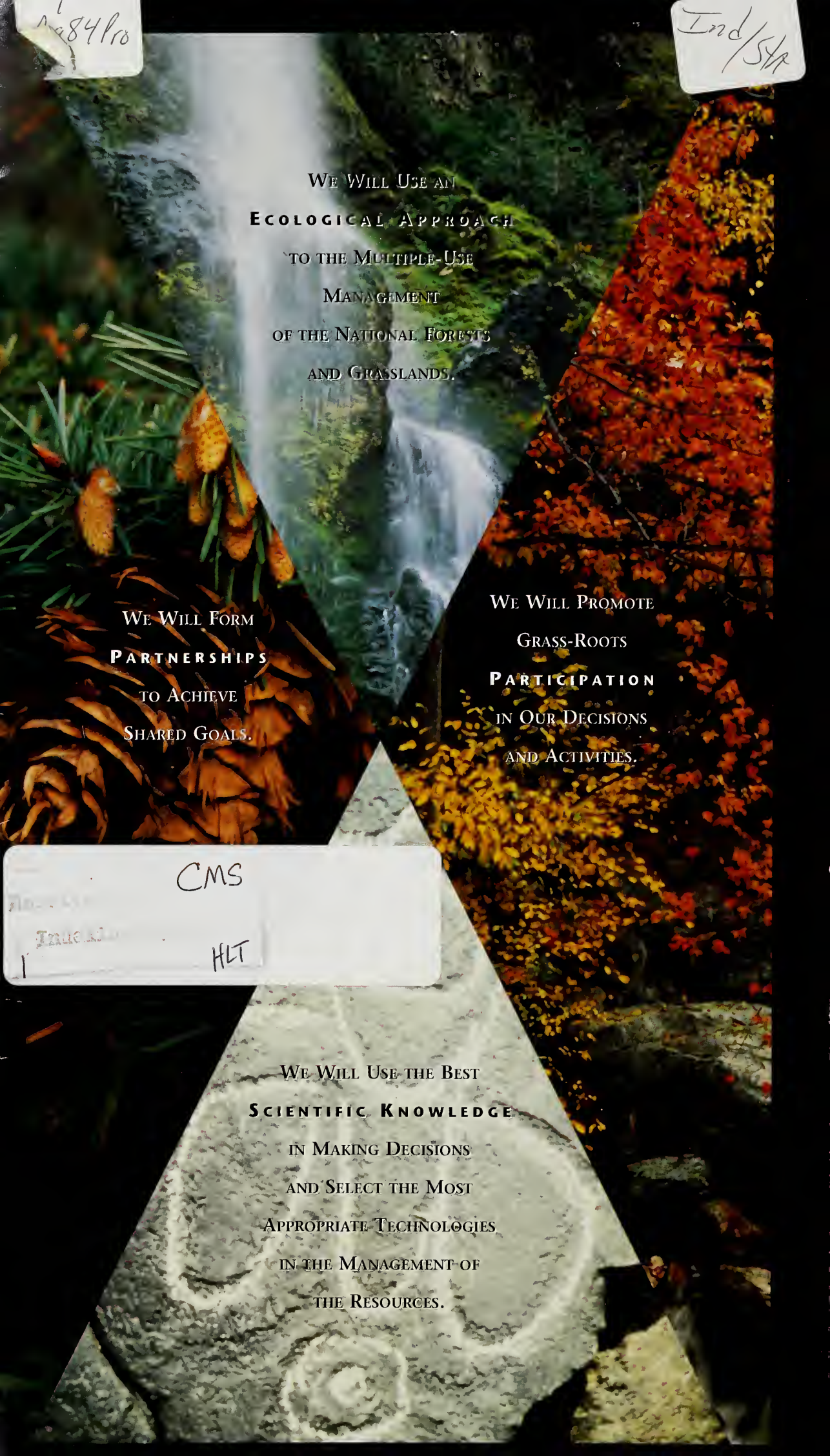
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April 1994

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We Will Use an
Ecological Approach
to the Multiple-Use
Management
of the National Forests
and Grasslands.

We Will Form
Partnerships
to Achieve
Shared Goals.

We Will Promote
Grass-Roots
Participation
in Our Decisions
and Activities.

CMS
HLT

We Will Use the Best
Scientific Knowledge
in Making Decisions
and Select the Most
Appropriate Technologies
in the Management of
the Resources.

